

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

E.I. DU PONT DE NEMOURS & CO.,

Defendant.

Civil Action No. **1:07 CV 558**

CONSENT DECREE

BECKWITH

J. BLACK

2007 NOV -6 AM 9:53
U.S.D.
SOUTHERN DISTRICT OF OHIO
WEST DIVISION

JACKSON
CLERK

TABLE OF CONTENTS:

I.	JURISDICTION AND VENUE.....	4
II.	APPLICABILITY	5
III.	DEFINITIONS	6
IV.	CIVIL PENALTY	9
V.	COMPLIANCE REQUIREMENTS	11
VI.	PERMITS.....	20
VII.	REPORTING REQUIREMENTS.....	23
VIII.	STIPULATED PENALTIES	26
IX.	FORCE MAJEURE.....	31
X.	DISPUTE RESOLUTION	34
XI.	INFORMATION COLLECTION AND RETENTION	36
XII.	EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS.....	38
XIII.	COSTS	39
XIV.	NOTICES.....	40
XV.	EFFECTIVE DATE	43
XVI.	RETENTION OF JURISDICTION	43
XVII.	MODIFICATION	43
XVIII.	TERMINATION.....	43
XIX.	PUBLIC PARTICIPATION	44
XX.	SIGNATORIES/SERVICE.....	45
XXI.	INTEGRATION.....	46
XXII.	FINAL JUDGMENT.....	46
XXIII.	APPENDICES	46

WHEREAS, Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (U.S. EPA), has filed a complaint concurrently with this Consent Decree, alleging that Defendant E.I. du Pont de Nemours and Company ("DuPont" or "Defendant"), violated Sections 111 and 165, 42 U.S.C. §§ 7411 and 7475, of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7401 et seq., the Title V Permit requirements of the Act, 42 U.S.C. § 7661; and the federally enforceable State Implementation Plans (SIPs) for Kentucky, Louisiana, Ohio and Virginia approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410, which incorporate and/or implement the above-listed federal requirements, with respect to emissions of sulfur dioxide and sulfuric acid mist;

WHEREAS, the Complaint against DuPont alleges that DuPont constructed, reconstructed or modified certain Sulfuric Acid Plants without obtaining required permits, installing required control technology, meeting emission limits, and complying with requirements for monitoring, record-keeping and reporting, as specified in the Act;

WHEREAS, the State of Ohio, the State of Louisiana, and David K. Paylor, Director, Virginia Department of Environmental Quality (collectively, the "State Plaintiffs") have filed Complaints in Intervention joining in the claims of the United States, and all Parties consent to such intervention;

WHEREAS, DuPont has agreed to reduce emissions from the four Sulfuric Acid Plants named in the Complaint and subject to this Consent Decree to levels no greater than emission levels equivalent to those that would result from the use of Best Available Control Technology (BACT), as defined at 40 C.F.R. § 52.21(b)(12), and to continue implementing best work practices at these Sulfuric Acid Plants;

WHEREAS, DuPont does not admit any liability to the United States or any of the State Plaintiffs arising out of the acts or omissions alleged in the Complaint and this Consent Decree resolves all allegations stated in the United States' and State Plaintiffs' Complaints, and nothing

in the Complaint or this Consent Decree, nor the execution and implementation of this Consent Decree, shall be treated as an admission or evidence of any violation of the Act and implementing regulations cited herein in any litigation or forum whatsoever, provided that the terms of this Consent Decree may be used in any action or dispute resolution proceeding to enforce the terms of this Consent Decree;

WHEREAS, DuPont has worked cooperatively with the United States and State Plaintiffs to structure a comprehensive program that will result in significant reductions of sulfur dioxide emissions annually from four DuPont Sulfuric Acid Plants in four states;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith, will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, below, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because some of the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. Defendant consents to this Court's jurisdiction over this Consent Decree and any action to enforce this Consent Decree, and to venue in this judicial district. For purposes of this Consent Decree and any action to enforce this Consent Decree, Defendant consents to this Court's jurisdiction over the Defendant.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint and the

State Plaintiffs' Complaints in Intervention state claims upon which relief may be granted pursuant to Sections 111 and 165 of the Act, 42 U.S.C. §§ 7411, 7475 and/or pursuant to state law.

3. Notice of the commencement of this action has been given to the States of Louisiana and Ohio and to the Commonwealths of Kentucky and Virginia, as required by Section 113 of the Act, 42 U.S.C. 7413.

II. APPLICABILITY

4. The obligations of this Consent Decree apply to and are binding upon the United States and the State Plaintiffs, and upon Defendant and its officers, employees, agents, subsidiaries, successors, assigns, or other entities or persons otherwise bound by law.

5. At least 30 days prior to any transfer of ownership or operation of any of the Facilities or any portion thereof, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer to the United States and to the State Plaintiff in which the relevant Facility is located, in accordance with Section XIV of this Decree (Notices). Any attempt to transfer ownership or operation of a Facility, or any portion thereof, without complying with the foregoing notice requirements constitutes a violation of this Decree. No such transfer, whether in compliance with the notice requirements of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Decree are implemented with respect to the Facility(ies) involved in the transfer, unless:

a. the transferee agrees in writing to undertake the obligations required by this Consent Decree with respect to the Facility(ies) being transferred, and to intervene as a Defendant in this action for the purpose of being bound by the applicable terms of this Consent Decree; and

b. the United States and the State Plaintiff, after receiving information

sufficient to demonstrate that the transferee has the technical and financial means to comply with the applicable obligations of this Consent Decree, consent in writing to substitute the transferee for Defendant with respect to such obligations; and

c. the Court approves such substitution.

6. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. DEFINITIONS

7. Terms used in this Consent Decree that are defined in the Act or in federal and state regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Acid mist" shall mean the pollutant sulfuric acid mist.

b. "Burnside" shall mean DuPont's Facility located at 3460 SR-44, Darrow, LA 70725.

c. "CEMS" or "Continuous Emission Monitoring System" shall mean equipment that continuously measures and records the emission rate of a pollutant, in pounds emitted per ton of 100% Sulfuric Acid Produced.

d. "Complaint" shall mean the Complaint filed by the United States, and the Complaints in Intervention filed by the State Plaintiffs.

e. "Consent Decree" or "Decree" shall mean this Consent Decree and all appendices attached hereto (listed in Section XXIII), but in the event of any conflict between the text of this Consent Decree and any Appendix, the text of this Consent Decree shall control.

f. "Day" shall mean a calendar day unless expressly stated to be a working day. In computing any period of time under this Consent Decree, where the last day would fall on a

Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

g. "Defendant" shall mean E.I. du Pont de Nemours & Co.

h. "Effective Date" shall have the meaning given in Paragraph 84.

i. "Facilities" shall mean DuPont's Burnside, Fort Hill, James River, and Wurtland operating sites that contain Sulfuric Acid Plants. Each of these Sites may be referred to as a "Facility."

j. "Fort Hill" shall mean DuPont's Facility located at 11215 Brower Road, North Bend, Ohio 45052.

k. "James River" shall mean DuPont's Facility located at 1201 Bellwood Rd., Richmond, VA 23237.

l. "Malfunction" shall mean, consistent with 40 C.F.R. § 60.2, any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner, but shall not include failures that are caused in part by poor maintenance or careless operation.

m. "Mass Cap" shall mean the maximum amount of SO₂ emissions for each Sulfuric Acid Plant expressed in tons of sulfur dioxide emitted during each 12-month period consisting of the most recently concluded month and the eleven months immediately preceding it. In determining compliance with the Mass Cap, all SO₂ emissions from a Sulfuric Acid Plant, including emissions during times of Startup, Shutdown, and Malfunction, shall be counted.

n. "Month" shall mean calendar month.

o. "100% Sulfuric Acid Produced" shall mean the stoichiometric quantity of sulfuric acid that would be produced at a Sulfuric Acid Plant if all sulfur trioxide (SO₃) exiting the converter were used to produce anhydrous sulfuric acid. For purposes of this definition, scrubber byproduct (if any) shall be considered to be included in "100% Sulfuric Acid

Produced”.

p. “NSR” shall mean a program for New Source Review under the Act.

Specifically, “non-attainment NSR” and “major NSR” as used herein refer to the non-attainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515; “minor NSR” as used herein refers to any state, regional or local statutes, ordinances or regulations calling for review and approval of non-major new and modified sources of air pollution.

q. “NSPS” shall mean the standards of performance for new stationary sources codified at 40 C.F.R. Part 60. General NSPS requirements are codified at 40 C.F.R. Part 60, Subpart A. NSPS requirements specifically for sulfuric acid plants are codified at 40 C.F.R. Part 60, Subpart H.

r. “Paragraph” shall mean a portion of this Consent Decree identified by an Arabic numeral.

s. “PSD” shall mean the attainment area New Source Review program (prevention of significant deterioration) within the meaning of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492.

t. “Parties” shall mean the United States, the State of Louisiana, the State of Ohio, and David K. Paylor, Director, Virginia Department of Environmental Quality, and DuPont.

u. “Section” shall mean a portion of this Consent Decree identified by a roman numeral.

v. “Short-term Limit” shall mean an emission limit for a pollutant for a Sulfuric Acid Plant specified herein, expressed in terms of pounds emitted per ton of 100% Sulfuric Acid Produced (“lbs/ton”), averaged over each 3-hour period consisting of the most recently completed hour and the two hours preceding it.

w. "Shutdown" shall mean the cessation of operation of a Sulfuric Acid Plant for any reason. Shutdown begins at the time the feed of sulfur or sulfur-bearing materials to the furnace ceases.

x. "SO₂" shall mean the pollutant sulfur dioxide.

y. "Startup" shall mean, with respect to any Sulfuric Acid Plant, the period of time, beginning when the feed of sulfur or sulfur-bearing materials to the furnace commences and lasting for no more than 24 hours, during which a Sulfuric Acid Plant has an elevated rate of SO₂ emissions.

z. "State Plaintiffs" or "States" shall mean the State of Louisiana, the State of Ohio, and David K. Paylor, Director, Virginia Department of Environmental Quality.

aa. "Sulfuric Acid Plant" or "Plant" shall mean a process unit engaged in the production of sulfuric acid and related products using the contact process. DuPont operates Sulfuric Acid Plants, that are subject to the requirements of this Consent Decree, at the Burnside, Fort Hill, James River, and Wurtland Facilities.

bb. "Title V Permit" shall mean a permit required by or issued pursuant to the requirements of 42 U.S.C. §§ 7661 - 7661f.

cc. "Ton" or "tons" shall mean short ton or short tons.

dd. "United States" shall mean the United States of America, acting on behalf of U.S. EPA.

ee. "U.S. EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

ff. "Wurtland" shall mean DuPont's Facility located at 400 Harris Rd., Wurtland, KY 41144.

IV. CIVIL PENALTY

8. Within thirty (30) days after the Effective Date of this Consent Decree, Defendant

shall pay to the Plaintiffs \$4,125,000 (four million one hundred twenty-five thousand dollars) as a civil penalty, in the following manner:

a. \$2,475,000 to the United States by FedWire Electronic Funds Transfer (EFT) to the U.S. Department of Justice in accordance with instructions to be provided to Defendant, following lodging of the Consent Decree, by the Financial Litigation Unit of the United States Attorney's Office for the Southern District of Ohio. At the time of payment, Defendant shall simultaneously send written notice of payment and a copy of any transmittal documentation (which shall reference DOJ case number 90-5-2-1-07950, USAO file number 2007VO1500, and the civil action number of this case) to the United States in accordance with Section XIV of this Decree (Notices).

b. \$550,000 to the State of Louisiana by certified check made payable to the Louisiana Department of Environmental Quality and sent to Darryl Serio, Fiscal Director, Office of Management and Finance, LDEQ, P.O. Box 4303, Baton Rouge, Louisiana 70821-4303.

c. \$550,000 to the State of Ohio by cashier's certified check payable to the order of "Treasurer, State of Ohio" and delivered to Martha Sexton, Paralegal, or her successor, Office of the Attorney General of Ohio, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215-3400. The memo portion of the check, or some other prominent location on the transmittal letter or documentation, shall include reference to "A. G. EAGO No. 340756." Twenty percent (20%) of the civil penalty paid to the State of Ohio, totaling \$110,000, shall be directed to Ohio EPA's Clean Diesel School Bus Program Fund (Fund 5CD). The balance shall be deposited in accordance with R. C. 3704.06.

d. \$550,000 to the Commonwealth of Virginia in the form of a certified check or cashier's check, payable to "the Treasurer of Virginia" and delivered to: Receipts Control, Department of Environmental Quality P.O. Box 1104, Richmond, VA 23218.

9. If any portion of the civil penalty due to the United States or a State Plaintiff is not paid when due, Defendant shall pay interest on the amount past due, accruing from the Effective Date through the date of payment, at the rate specified in 28 U.S.C. § 1961. Interest payment under this Paragraph shall be in addition to any stipulated penalty due.

10. No amount of the civil penalty or interest paid by Defendant shall be used to reduce its federal or state tax obligations.

V. COMPLIANCE REQUIREMENTS

11. SO₂ Emission Limits, Mass Caps, and Schedule of Compliance:

a. Burnside: No later than September 1, 2009, the Burnside Sulfuric Acid Plant shall meet a short-term SO₂ emission limit of 2.4 lbs/ton and shall be subject to a Mass Cap of 1007 tons. Defendant shall demonstrate compliance with this Mass Cap as of September 1, 2010 for the 12-month period of September 2009 through August 2010, and thereafter as of the first of each month for the immediately preceding consecutive 12-month period, in the manner specified in Paragraph 19.a.ii.

b. James River: No later than March 1, 2010, the James River Sulfuric Acid Plant shall meet a short-term SO₂ emission limit of 1.5 lbs/ton and shall be subject to a Mass Cap of 123 tons. Defendant shall demonstrate compliance with this Mass Cap as of March 1, 2011 for the 12-month period of March 2010 through February 2011, and thereafter as of the first of each month for the immediately preceding consecutive 12-month period, in the manner specified in Paragraph 19.a.ii.

c. Fort Hill: No later than March 1, 2011 or the Alternate Compliance Date if selected, the Fort Hill Sulfuric Acid Plant shall meet a short-term SO₂ emission limit of 2.2 lbs/ton and shall be subject to a Mass Cap of 281 tons. Defendant shall demonstrate compliance with this Mass Cap as of March 1, 2012 (for the 12-month period of March 2011 through February 2012), or as of March 1, 2013 (for the 12-month period of March 2012

through February 2013) if the Alternate Compliance Date is selected; and thereafter as of the first of each month for the immediately preceding consecutive 12-month period, in the manner specified in Paragraph 19.a.ii.

d. Wurtland: No later than March 1, 2012 or the Alternate Compliance Date if selected, the Wurtland Sulfuric Acid Plant shall meet a short-term SO₂ emission limit of 1.7 lbs/ton and shall be subject to a Mass Cap of 248 tons. Defendant shall demonstrate compliance with this Mass Cap as of March 1, 2013 (for the 12-month period of March 2012 through February 2013), or as of March 1, 2012 (for the 12-month period of March 2011 through February 2012) if the Alternate Compliance Date is selected; and thereafter as of the first of each month for the immediately preceding consecutive 12-month period, in the manner specified in Paragraph 19.a.ii.

12. SO₂ Emission Limits During Startup: After the date specified in Paragraph 11 for each Sulfuric Acid Plant's compliance with the short-term SO₂ emission limit, that short-term emission limit shall apply at all times (including periods of Shutdown), except for periods of Startup and Malfunction.

a. Notwithstanding the provisions of Paragraph 11, after the date specified in Paragraph 11 for compliance at each Sulfuric Acid Plant, for any three-hour period that includes at least one hour during Startup, each Sulfuric Acid Plant shall meet the Short-term Limit for SO₂ emissions specified in Appendix A.

b. The Short-term Limits on SO₂ emissions specified in Appendix A shall apply during any Malfunction period that occurs during Startup, unless the total mass of SO₂ emissions that result from keeping the Plant in operation during and after the Malfunction is in good faith estimated to be less than the total SO₂ emissions that would result from shutting down the Plant during Malfunction and subsequently having another Startup at that Sulfuric Acid Plant. Consistent with Paragraph 17, Defendant shall take all steps practicable to

minimize the frequency of occurrence of Startup and Malfunction and the duration of each Startup and Malfunction.

13. Interim SO₂ Emission Limits:

a. Fort Hill: The Fort Hill Sulfuric Acid Plant shall meet an interim Short-term Limit for SO₂ emissions of 20.0 lbs/ton, beginning no later than the first operation of the Fort Hill Sulfuric Acid Plant after its first regularly scheduled maintenance turnaround that occurs after the Effective Date of this Consent Decree and continuing until March 1, 2011 or the Alternate Compliance Date if selected.

b. Wurtland: The Wurtland Sulfuric Acid Plant shall meet an interim Short-term Limit for SO₂ emissions of 21.0 lbs/ton, beginning no later than the Effective Date of this Consent Decree and continuing until March 1, 2012 or the Alternate Compliance Date if selected.

14. Acid Mist Emission Limits: Each of the Sulfuric Acid Plants shall comply with the NSPS, Subpart H sulfuric acid mist emission limitation of 0.15 lbs/ton of 100% Sulfuric Acid Produced, as set forth at 40 C.F.R. § 60.83, no later than the date specified in Paragraph 11 for that Plant's compliance with the Short-term Limit for SO₂ emissions set forth in Paragraph 11. Compliance with this limit is to be demonstrated using the performance test required by Paragraph 20.a.i of this Consent Decree.

15. Alternate Compliance Dates for Fort Hill and Wurtland: Defendant may select Alternate Compliance Dates for the Fort Hill and Wurtland Sulfuric Acid Plants, provided that Defendant gives written notice of that selection to the United States and the State of Ohio no later than March 1, 2010 and that Defendant selects Alternate Compliance Dates for both the Fort Hill and Wurtland Plants. If Defendant so selects the Alternate Compliance Dates then for purposes of all other provisions of this Consent Decree with respect to the Fort Hill and Wurtland Plants the Alternate Compliance Dates set forth in this Paragraph shall be deemed the

dates specified for compliance in Paragraph 11. If Defendant so selects the Alternate Compliance Dates, then:

a. the Fort Hill Plant shall meet the interim SO₂ emission limit specified in Paragraph 13.a from the beginning time specified in Paragraph 13.a and continuing until March 1, 2012; shall meet the short-term SO₂ emission limit specified in Paragraph 11.c and the acid mist emission limit specified in Paragraph 14 no later than March 1, 2012; and shall demonstrate compliance with the Mass Cap specified in Paragraph 11.c as of March 1, 2013 (for the 12-month period of March 2012 through February 2013); and

b. the Wurtland Plant shall meet the interim SO₂ emission limit specified in Paragraph 13.b from the beginning time specified in Paragraph 13.b and continuing until March 1, 2011; shall meet the short-term SO₂ emission limit specified in Paragraph 11.d and the acid mist emission limit specified in Paragraph 14 no later than March 1, 2011; and shall demonstrate compliance with the Mass Cap specified in Paragraph 11.d as of March 1, 2012 (for the 12-month period of March 2011 through February 2012).

16. NSPS Applicability: Each Sulfuric Acid Plant covered by this Consent Decree shall be considered an affected facility for purposes of the New Source Performance Standard (NSPS), 40 C.F.R. Part 60, Subpart H, no later than the date specified for compliance with the SO₂ emission limit for such Plant as set forth in Paragraph 11 above. After such date, each Sulfuric Acid Plant shall comply with all applicable requirements for affected facilities under the NSPS 40 C.F.R. Part 60, Subparts A and H, or with the requirements of this Consent Decree if more stringent. Satisfactory compliance with notice and compliance demonstration obligations set forth in this Consent Decree shall be deemed to satisfy all applicable initial notification and compliance demonstration requirements of NSPS Subparts A and H.

17. Best Practices: At all times after the Effective Date of this Consent Decree, including periods of Startup, Shutdown, and Malfunction, Defendant shall to the extent

practicable maintain and operate each of its Sulfuric Acid Plants, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, consistent with 40 C.F.R. § 60.11 (d).

18. O & M Plans: Defendant shall prepare an Operation and Maintenance Plan ("O & M Plan") for each Sulfuric Acid Plant. Each O & M plan shall describe operating and maintenance procedures necessary to (1) minimize the frequency of Sulfuric Acid Plant Shutdowns (thereby reducing the number of Startups of each Sulfuric Acid Plant) and (2) minimize the quantity of emissions of all pollutants at all times, including periods of Startup and Malfunction.

a. For the Burnside Sulfuric Acid Plant, Defendant shall submit a proposed O & M Plan to U.S. EPA and the State of Louisiana no later than 180 days after the Effective Date of this Consent Decree. For the James River, Fort Hill, and Wurtland Plants, Defendant shall submit a proposed O & M Plan to U.S. EPA and to the State Plaintiff in which the Plant is located no later than 120 days before the date specified in Paragraph 11 for compliance with the short-term SO₂ emission limit applicable to that Plant. U.S. EPA will review the O & M Plan for each Sulfuric Acid Plant and, after a reasonable opportunity for review and comment by the pertinent State, may in writing approve, disapprove, or approve with modifications, the O & M Plan. If U.S. EPA disapproves any O & M Plan submitted by Defendant, within 60 days of receipt of the disapproval Defendant shall submit a revised O & M Plan correcting the deficiencies noted in the disapproval.

b. On and after the date specified in Paragraph 11 for compliance with the short-term SO₂ emission limit applicable to a Plant, Defendant shall comply with the O & M Plan for that Plant unless and until such O & M Plan is disapproved or approved with modifications. Any failure to so comply shall be a violation of this Consent Decree. Once an O & M Plan has been approved or approved with modifications, Defendant shall comply with that

O & M Plan as approved, and failure to do so shall be a violation of this Consent Decree. Any failure by U.S. EPA to act on a submitted O & M Plan shall not extend the compliance dates specified in Paragraphs 11 and 13 nor excuse any non-compliance with any emission limit or Mass Cap specified in this Consent Decree.

c. No less frequently than once every three years, Defendant shall review, and update as necessary, its approved O & M Plan for each Sulfuric Acid Plant. Within 30 days after each such review, Defendant shall provide written notice to U.S. EPA and to the State Plaintiff in which the relevant Plant is located either (1) of changes made to the O & M Plan or (2) that no change to the O & M Plan was required. U.S. EPA may, after a reasonable opportunity for review and comment by the pertinent State, approve, disapprove, or approve with modifications, any changes to an O & M Plan pursuant to this sub-Paragraph. Defendant shall comply with each changed O & M Plan immediately upon submission of the changes unless and until the changes are disapproved or approved with modifications, and any failure to so comply shall be a violation of this Consent Decree. Once changes to an O & M Plan have been approved or approved with modifications, Defendant shall comply with the changed O & M Plan as approved, and failure to do so shall be a violation of this Consent Decree. Any failure by U.S. EPA to act on submitted changes to an O & M Plan shall not extend the compliance dates specified in Paragraphs 11 and 13 nor excuse any non-compliance with any emission limit or Mass Cap specified in this Consent Decree.

d. Any disapproval or approval with modifications by U.S. EPA under this Paragraph shall be subject to Dispute Resolution pursuant to Section X.

19. Emissions Monitoring:

a. At each of its Sulfuric Acid Plants, no later than the earlier of (i) the date specified for compliance with the SO₂ emission limit for such Plant as set forth in Paragraph 11 or (ii) the date specified for compliance with the interim SO₂ emission limit for such Plant as set

forth in Paragraph 13, Defendant shall install and make operational a SO₂ continuous emissions monitoring system (CEMS). Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS shall be in continuous operation, and shall be used at each Sulfuric Acid Plant to demonstrate compliance with the SO₂ emission limits and Mass Caps established in Paragraphs 11, 12, and 13 of this Consent Decree. Defendant shall monitor and record SO₂ emissions from each Sulfuric Acid Plant as follows:

- i. The SO₂ CEMS shall continuously monitor and record the 3-hour arithmetic average SO₂ emission rate from each Sulfuric Acid Plant in units of pounds of SO₂ emitted per ton of 100% acid produced.
 - ii. By the fifteenth day of each month, Defendant shall determine and record the total mass of SO₂ emitted from each Sulfuric Acid Plant in the 12-month period preceding the current month.
 - iii. The CEMS shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 C.F.R. §§ 60.11, 60.13, Part 60, Appendix B Performance Specification 2, and Part 60 Appendix F Procedure 1. If an oxygen monitor is necessary, it shall meet 40 C.F.R. Part 60, Appendix B Performance Specification 3. If a tail gas volumetric flow rate monitor is necessary, it shall meet 40 C.F.R. Part 60, Appendix B Performance Specification 6.
- b. Defendant shall submit to U.S. EPA for review and approval a written SO₂ CEMS Plan for each Sulfuric Acid Plant, no later than 180 days after the Effective Date of this Consent Decree. Each SO₂ CEMS Plan shall describe how Defendant proposes to implement the monitoring requirements of Paragraph 19.a. Each SO₂ CEMS Plan shall include procedures for accurately monitoring pounds of SO₂ emissions per ton of 100% sulfuric acid production and the SO₂ mass emission rate. U.S. EPA will review each SO₂ CEMS Plan and may, after a reasonable opportunity for review and comment by the relevant State, approve it, disapprove it,

or approve it with modifications. Such approval, disapproval, or approval with modifications shall be in writing. If a SO₂ CEMS Plan is disapproved, within 60 days of receipt of the disapproval, Defendant shall submit a revised SO₂ CEMS Plan that corrects deficiencies noted in the disapproval. Once an SO₂ CEMS Plan has been approved or approved with modifications, Defendant shall, upon installation of the SO₂ CEMS at each Sulfuric Acid Plant, implement and thereafter comply with the SO₂ CEMS Plan, and failure to do so shall be a violation of this Consent Decree. Any failure by U.S. EPA to act on a submitted SO₂ CEMS Plan shall neither extend the dates by which the SO₂ CEMS must be installed nor excuse any non-compliance with the SO₂ CEMS monitoring requirements of this Paragraph. Approval of each SO₂ CEMS Plan shall constitute approval of an alternative monitoring plan for purposes of NSPS, per 40 C.F.R. § 60.13(i).

c. Defendant shall take all steps necessary to avoid CEMS breakdowns and minimize CEMS downtime. This shall include, but is not limited to, operating and maintaining the CEMS in accordance with best practices and maintaining an on-site inventory of spare parts or other supplies necessary to make rapid repairs to the equipment.

d. In the event of CEMS downtime lasting longer than 24 hours, Defendant shall demonstrate compliance with the applicable SO₂ emission limits and Mass Caps in Paragraph 11, 12, and 13 using suitable methods, *e.g.*, the Reich test, National Air Pollution Control Administration Publication No. 999-AP-13. Reich tests or tests using other suitable methods shall be conducted and analyzed once every three hours while the Sulfuric Acid Plant is operating until the CEMS resumes operation. Reich test data or data from other suitable test methods shall be converted to units of lbs/ton using best engineering judgment. In the event of downtime of the flow monitor or other equipment necessary for a Reich test or other suitable test method, Defendant shall estimate and record the SO₂ mass emission rate in accordance with best engineering judgment.

20. Performance Testing

a. For each Sulfuric Acid Plant, Defendant shall conduct the following performance tests, and shall submit to U.S. EPA and to the State in which the Sulfuric Acid Plant is located a report documenting the results of the performance tests, no later than 180 days after the date specified in Paragraph 11 above for such Sulfuric Acid Plant's compliance with its short-term SO₂ emission limit:

i. a performance test measuring the emission rate of acid mist from each Sulfuric Acid Plant in accordance with the applicable requirements of 40 C.F.R. Part 60 Appendix A, Reference Method 8, or an alternative method approved by EPA. This performance test shall be used to demonstrate compliance with the acid mist emission limit established in Paragraph 14 and may serve as the NSPS performance test required under 40 C.F.R. § 60.8. Defendant shall take all steps necessary to assure accurate measurements of 100% sulfuric acid production during each test run.

ii. a performance test measuring the emission rate of SO₂ from each Sulfuric Acid Plant, in accordance with the applicable requirements of 40 C.F.R. Part 60 Appendix A, Reference Method 8, and Part 60 Appendix B, Performance Specification 2. This test shall consist of at least nine reference method test runs and may serve as the CEMS relative accuracy test required under Performance Specification 2. If applicable, this test may also serve as the NSPS performance test required under 40 C.F.R. § 60.8. Defendant shall take all steps necessary to assure accurate measurements of 100% sulfuric acid production during each test run.

b. No later than 30 days before any performance test required by this Consent Decree is conducted, Defendant shall provide notice of its intent to conduct such test to U.S. EPA and the State in which the Sulfuric Acid Plant is located, using the procedures specified in Section XIV (Notice). This notification must include the scheduled date of the test, an

emissions test protocol, a description of the planned operating rate and operating conditions, and the procedures that will be used to measure 100% sulfuric acid production. If U.S. EPA or the State Plaintiff requires any adjustment of the testing protocol or operating conditions, Defendant shall make such adjustments and conduct the performance test in conformity with U.S. EPA's and the State's requirements.

21. Facility Shutdown: Defendant, in its sole discretion, may permanently cease operation of any Facility, except Burnside, prior to the compliance date specified for that Sulfuric Acid Plant in Paragraph 11. No later than 90 days prior to the permanent cessation of operation of a Facility, Defendant shall notify the U.S. EPA and the relevant state as specified in Section XIV (Notices) of its intent to cease operations at that Facility.

a. Upon the cessation of operation of a Facility, Defendant shall surrender all air pollution permits for that Facility to the permitting authority. Defendant shall not file any application for emission reduction credits as a result of such cessation of operation. Defendant shall not use any emission reductions resulting from such cessation of operation, in any netting calculation. Defendant shall not sell any emission credits obtained as a result of emission reductions resulting from such cessation of operation.

b. Provided that Defendant has complied with the requirements of Paragraph 21.a, then upon the cessation of operation of a Facility, that Facility shall cease to be subject to this Consent Decree, except for the obligation to pay any stipulated penalties that may be due pursuant to Section VII with respect to that Facility and the recordkeeping requirement in Paragraph 73.

VI. PERMITS

22. Defendant shall obtain all required federal, state, or local permits necessary for performing any compliance obligation under this Consent Decree, including without limitation permits for construction of pollution control technology and the installation of equipment at the